

Ch 11 Test Review

1. Assuming STP, calculate the masses of each of the following volumes of gases.
 - a. 22.4L of NH_3
 - b. 12.1L of H_2O
 - c. 678 ml of CO_2
2. One liter of a gas has a mass of 0.716g at STP. What is its molar mass?
3. What is the density of H_2S at 723 torr and 55°C ?
4. An amount of chlorine gas occupies a volume of 50.0L at 27°C and 721mm Hg. What is the mass of the chlorine?
5. If 15.1g of copper(II) sulfate pentahydrate is heated, what volume of water vapor is produced at STP?
6. The decomposition of potassium chlorate at 730 mm Hg and 25°C produces 143 ml of O_2 . What mass of potassium chlorate was used?
7. If 30.2L of hydrogen are combined with 24.3g of oxygen how much water vapor is produced at STP?